

meets the manufacturer's design criteria.

(2) An acoustical calibrator of the microphone coupler type designed for the sound level measurement system in use shall be used to calibrate the sound level measurement system in accordance with paragraph (b)(1)(i) of this section. The calibration must meet or exceed the accuracy requirements specified in section 5.4.1 of the American National Standard Institute Standards, "Method for Measurement of Sound Pressure Levels," (ANSI S1.13-1971) for field method measurements.

(c) Acoustical environment, weather conditions, and background noise requirements are prescribed in §201.23 of the Standards. In addition, a measurement tolerance of 2 dB(A) for a given measurement will be allowed to take into account the effects of the factors listed below and the interpretations of these effects by enforcement personnel:

- (1) The common practice of reporting field sound level measurements to the nearest whole decibel;
- (2) Variations resulting from commercial instrument tolerances;
- (3) Variations resulting from the topography of the noise measurement site;
- (4) Variations resulting from atmospheric conditions such as wind, ambient temperature, and atmospheric pressure; and
- (5) Variations resulting from reflected sound from small objects allowed within the test site.

§210.27 New locomotive certification.

(a) A railroad shall not operate a locomotive built after December 31, 1979, unless the locomotive has been certified to be in compliance with the Standards.

(b) The certification prescribed in this section shall be determined for each locomotive model, by either—

- (1) Load cell testing in accordance with the criteria prescribed in the Standards; or
 - (2) Passby testing in accordance with the criteria prescribed in the Standards.
- (c) If passby testing is used under paragraph (b)(2) of this section, it shall be conducted with the locomotive oper-

ating at maximum rated horsepower output.

(d) Each new locomotive certified under this section shall be identified by a permanent badge or tag attached in the cab of the locomotive near the location of the inspection Form F 6180.49. The badge or tag shall state:

- (1) Whether a load cell or passby test was used;
- (2) The date and location of the test; and
- (3) The A-weighted sound level reading in decibels obtained during the passby test, or the readings obtained at idle throttle setting and maximum throttle setting during a load cell test.

§210.29 Operation standards (moving locomotives and rail cars).

The operation standards for the noise emission levels of moving locomotives, rail cars, or consists of locomotives and rail cars are prescribed in the Standards and duplicated in appendix A of this part.

(a) Measurements for compliance shall be made in compliance with the provisions of subpart C of the Standards and the following:

- (1) Consists of locomotives containing at least one locomotive unit manufactured prior to December 31, 1979, shall be evaluated for compliance in accordance with §201.12(a) of the Standards, unless a locomotive within the consist is separated by at least 10 rail car lengths or 500 feet from other locomotives in the consist, in which case such separated locomotives may be evaluated for compliance according to their respective built dates.
 - (2) Consists of locomotives composed entirely of locomotive units manufactured after December 31, 1979, shall be evaluated for compliance in accordance with §201.12(b) of the Standards.
 - (3) If the inspector cannot establish the built dates of all locomotives in a consist of locomotives measured under moving conditions, evaluation for compliance shall be made in accordance with §201.12(a) of the Standards.
- (b) Noise emission standards for rail cars operating under moving conditions are contained in §201.13 of the Standards and are stated in appendix A of this part. If speed measurement equipment used by the inspector at the